IDAHO DEPARTMENT OF FISH & GAME

Joseph C. Greenley, Director

FEDERAL AID TO FISH AND WILDLIFE RESTORATION

Job Performance Report

Project F-53-R-12



LAKE AND RESERVOIR INVESTIGATIONS

Job XVII-a. Salmon Falls Creek Reservoir Fisheries Investigations

Period Covered: 1 March 1976 - 28 February 1977

by

Jerry Mallet Fishery Research Supervisor

JOB PERFORMANCE REPORT

State of <u>Idaho</u>	Name: LAKE AND RESERVOIR INVESTIGATIONS		
Project No <u>F-53-R-12</u>	Title: <u>Salmon Falls Creek Reservoir</u> <u>Fisheries Investigations</u>		
Joh No. XVTT-a	·		

Period Covered: 1 March 1976 to 28 February 1977

ABSTRACT

Gill net sets in Salmon Falls Creek Reservoir yielded rainbow trout, kokanee, coho, perch and crappie. Rainbow made up the bulk of the catch. No walleyes were captured in this year's netting.

Our angler tag returns from 1976 and our results in 1975 indicate the spring planting of 1975 contributed fewer fish to the fishery than the summer and fall plants. It also appears that the summer releases contributed most to the fishery during the same year. The fall plants contribute most to the fishery during the following year.

Author:

Jerry Mallet Fishery Research Supervisor

RECOMMENDATIONS

Monitor Salmon Falls Creek Reservoir each fall in order to evaluate the progress of walleye population establishment.

OBJECTIVES

To monitor fish distribution and abundance in Salmon Falls Creek Reservoir.

To evaluate the survival and growth of walleye and kokanee.

To determine survival and growth of hatchery rainbow trout marked and released in Salmon Falls Creek Reservoir during 1975.

TECHNIQUES USED

We set gill nets in Salmon Falls Creek Reservoir at the three stations that we sampled in 1975. The spring gillnetting was undertaken as scheduled but we were unable to monitor the fish populations in the fall. We continued to receive tags which we evaluated.

FINDINGS

We continued sampling at the three stations we sampled in 1975. The number of game fish we captured from overnight sets of our gill nets are given below.

	Near <u>Antelope Bay</u>	Gray's <u>Landing</u>	China <u>Creek</u>
Unmarked rainbow trout Jaw tag rainbow trout Ad clip rainbow trout Kokanee Coho Perch Crappie	19	28	19
	6	5	4
	1	0	0
	3	1	0
	1	1	0
	2	3	12
	0	0	4

About 18% of the captured rainbow were jaw tagged, and only 1.2% were adipose clipped. The ad clip trout were planted in the summer of 1975 as fry-fingerlings, and so far have contributed little to the fishery. The single adipose clipped trout was 290 mm (11.4 in) total length. All rainbow captured in vertical nets were in the surface ten foot layer of water, or the warmest vertical layer. Surface water temperatures were warmest at China Creek, 3.2 C. This is the same site where we captured most crappie and perch in spring 1975. This year the perch were ripe, but the crappie lacked a few weeks before ready to spawn.

Anglers continued returning tags from rainbow trout captured from Salmon Dam Reservoir. Three tags were returned from fish in the 20 March 1975 plant

of 1,300 fish at Gray's Landing. Three were also returned from the 24 March 1975 plant if 1,300 rainbows at the boat ramp. One tag was returned from the 3 April 1975 plant of 1,300 rainbows at Norton's Bay. Nineteen tags were returned from the 1 August 1975 plant of 4,000 fish at Gray's Landing. Anglers returned 149 tags from the 20 November 1975 plant of 4,400 fish at Gray's Landing. Information supplied by anglers show limited movement of trout from the release site.

Our angler tag return information from 1976 and our fishery study in 1975 indicate the spring planting of 1975 contributed fewer fish to the fishery than the summer and fall plants. Again looking at our information for two years, it appears the summer plants contribute most to the fishery during that same year. The fall plants contribute most to the fishery during the following year.

Submitted by:

Jerry Mallet Fishery Research Supervisor Bureau of Fisheries Approved by:

IDAHO DEPARTMENT OF FISH AND GAME

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